TEMPORARY STORM WATER RUN-ON BYPASS & EXCAVATION DEWATERING INFORMATION PACKAGE

CONTRACT NO. 04-0060A4

04-Sol, CC-680-0.8/0.0, 38.8/40.8, 780-2.5/0.5

IN SOLANO AND CONTRA COSTA COUNTIES IN BENICIA AND MARTINEZ ON ROUTE 680 FROM BAYSHORE ROAD TO 1.5 KM SOUTH OF MOCOCO OVERHEAD STRUCTURE AND ON ROUTE 780 FROM EAST FIFTH STREET TO ROUTE 680

California Department of Transportation
District 4
Water Quality Program
111 Grand Avenue
Oakland, California 94612

September 2007

1. Data For Estimating Quantity of Groundwater

The soils that may be encountered in the project area can be summarized in descending order as follows:

1. Thick layer of Asphalt concrete between 0.72' (0.22 m) to 10' (3.05 m) thick
2. Thin layer of artificial fill (Silty Sand, Sand, and Gravel)
3. Engineered Fill up to 15' (4.6 m)
4. Young Bay mud, dark grayish green, organic rich clay, containing occasional gravel and sand layers up to 50' (15.3 m) deep

According to the Log of Test Borings carried out by Caltrans in 2002 and 2001, the soil profile of the project area mainly consists of the following soils (Refer to the Logs of Test Borings):

Unified Soil Classification	**Coefficient of Permeability K (cm./day)**	***Coefficient of Permeability K (ft./day)**
Silty Sand (SM)	$82.3X\ 10^{-4}$ to 42.7	$2.7X\ 10^{-4}$ to 1.4
Silty gravel (GM)	$82.3\ X10^{-4}$ to 823	$2.7X\ 10^{-4}$ to 27
Bay Mud (CH)	$82.3X10^{-7}$ to $82.3X10^{-5}$	$2.7X10^{-7}$ to $2.7X10^{-5}$
Clayey Sand (SC)	$82.3X\ 10^{-5}$ to 4.27	$2.7X\ 10^{-5}$ to 0.14
Elastic Silt with Sand (MH)	$82.3X\ 10^{-6}$ to $82.3X10^{-4}$	$2.7X\ 10^{-6}$ to $2.7X\ 10^{-4}$
Well graded Sand (SW)	42.7 to 4175.8	1.4 to 137
Poorly graded Sand (SP)	4.27 to 42.7	0.14 to 1.4
Clay (CL)	$82.3X10^{-5}$ to $82.3X10^{-3}$	$2.7X10^{-5}$ to $2.7X10^{-3}$
Silt (ML)	$82.3X\ 10^{-5}$ to 4.27	$2.7X\ 10^{-5}$ to 0.14
Clay with Sand (CH)	$82.3X10^{-7}$ to $82.3X10^{-5}$	$2.7X10^{-7}$ to $2.7X10^{-5}$
Poorly graded Gravel (GP)	417.6 to 835152	13.7 to 27,400
Gravel with clay (GC)	$82.3X10^{-5}$ to $82.3X10^{-2}$	$2.7X10^{-5}$ to $2.7X10^{-2}$

*Federal Highway Report No. FHWA-TS-80-224

Our estimate of the seepage rate (flow rate) for the project area varies from approximately 5 gallons/day/ft^2 (204 liters/day/m^2) in areas with thick Bay Mud deposits to approximately 15 gallons/day/ ft^2 (611 liters/day/m^2) of cross-sectional area of excavation below the groundwater table.

These estimates are provided for estimating purposes only and shall not be made a part of the contract documents. The Bidders may use the coefficients of permeability listed above in conjunction with the boring logs to compute his/her own flow rates.

2. Contaminated Groundwater Summary

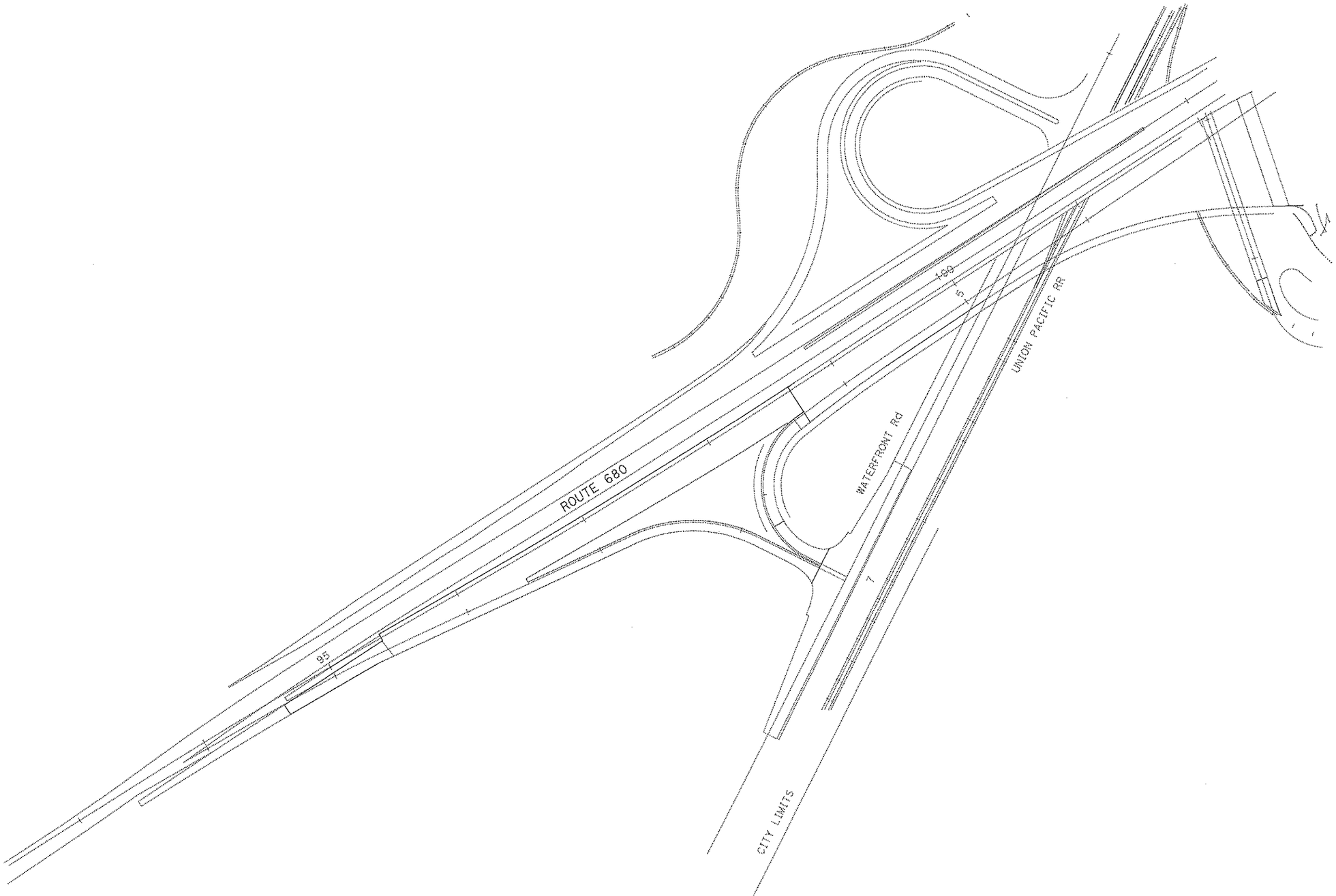
Groundwater within the project limits from 1.5 km south to 0.1 km north of Mococo Overhead and along Marina Vista Road and Waterfront Road contains pollutants from industrial and natural processes. Petroleum hydrocarbon contamination due to previous leaks and spills of oil from storage tanks and transmission pipelines is widespread throughout the water-bearing zone. The groundwater also contains other organic compounds resulting from accumulation of dead plants and marine organisms, a condition indigenous to a marsh environment. Heavy metal contamination due primarily to deposits of iron oxide cinders originating from the former Mountain Copper Company smelter is present in the vicinity of the deposits. Heavy metals also occur naturally in groundwater.

Based on analysis of the groundwater and performance of treatment systems used on previous contracts, it appears that the hydrocarbons are dissolved components, dispersed small diameter oil droplets, adsorbed to solids, or a combination of these conditions. Hydrocarbon concentrations in the groundwater may range from less than 1 mg/l to 15 mg/l depending on the location. The ratio of lighter (more soluble) to heavier (less soluble) molecular weight components also varies with location. Polycyclic aromatic hydrocarbons, which could be an indicator of dispersed oil, were not detected in the water samples collected within the area.

A granular activated carbon (GAC) filtration system that was initially installed to treat groundwater removed from excavations on a previous contract quickly experienced breakthrough of diesel range hydrocarbons. Subsequently, a standard gravity oil/water separator (OWS) was installed in an attempt to remove oil droplets that might be blinding the GAC filters. The OWS was not effective in preventing further breakthrough, indicating either any oil droplets were too small to be effectively removed by the OWS or the hydrocarbons were passing through the GAC adsorbed to other organic matter. A second system that included a filter media to remove solids ahead of several GAC filters was effective in meeting the performance standards of the discharge permit.

It can be concluded that an effective groundwater treatment system for the site should have a solids removal phase (settling tank(s), sand or synthetic media filter(s), etc.); a heavy molecular weight hydrocarbon and organic components removal phase (synthetic media filter(s), granular activated clay filter vessel(s), enhanced OWS, etc.); and a finishing phase (GAC filter vessel(s)), to remove highly soluble, volatile components.

3. Conceptual Stormwater Run-On Discharges Bypass Plan

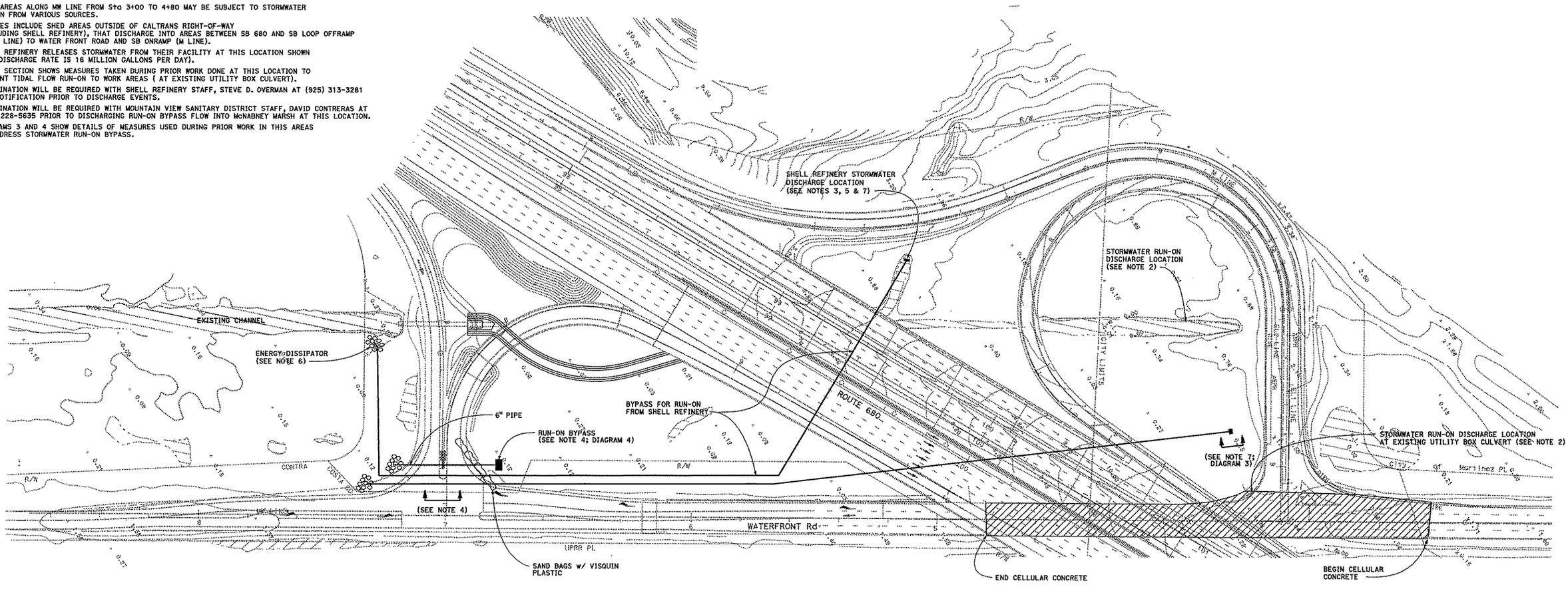


SURFACE WATER RUN-ON BYPASS PLAN
LOCATION MAP

DIAGRAM 1

NOTES:

1. WORK AREAS ALONG MW LINE FROM Sta 3+00 TO 4+80 MAY BE SUBJECT TO STORMWATER RUN-ON FROM VARIOUS SOURCES.
2. SOURCES INCLUDE SHED AREAS OUTSIDE OF CALTRANS RIGHT-OF-WAY (INCLUDING SHELL REFINERY), THAT DISCHARGE INTO AREAS BETWEEN SB 680 AND SB LOOP OFFRAMP (EL2 LINE) TO WATER FRONT ROAD AND SB ONRAMP (M LINE).
3. SHELL REFINERY RELEASES STORMWATER FROM THEIR FACILITY AT THIS LOCATION SHOWN (Max DISCHARGE RATE IS 16 MILLION GALLONS PER DAY).
4. CROSS SECTION SHOWS MEASURES TAKEN DURING PRIOR WORK DONE AT THIS LOCATION TO PREVENT TIDAL FLOW RUN-ON TO WORK AREAS (AT EXISTING UTILITY BOX CULVERT).
5. COORDINATION WILL BE REQUIRED WITH SHELL REFINERY STAFF, STEVE D. OVERMAN AT (925) 313-3281 FOR NOTIFICATION PRIOR TO DISCHARGE EVENTS.
6. COORDINATION WILL BE REQUIRED WITH MOUNTAIN VIEW SANITARY DISTRICT STAFF, DAVID CONTRERAS AT (925) 228-5635 PRIOR TO DISCHARGING RUN-ON BYPASS FLOW INTO McNABNEY MARSH AT THIS LOCATION.
7. DIAGRAMS 3 AND 4 SHOW DETAILS OF MEASURES USED DURING PRIOR WORK IN THIS AREAS TO ADDRESS STORMWATER RUN-ON BYPASS.



CONCEPTUAL STORMWATER BYPASS PLAN

DIAGRAM 2

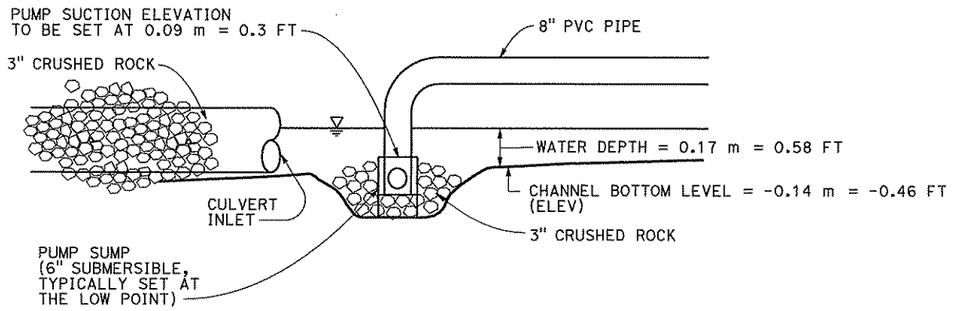


DIAGRAM 3

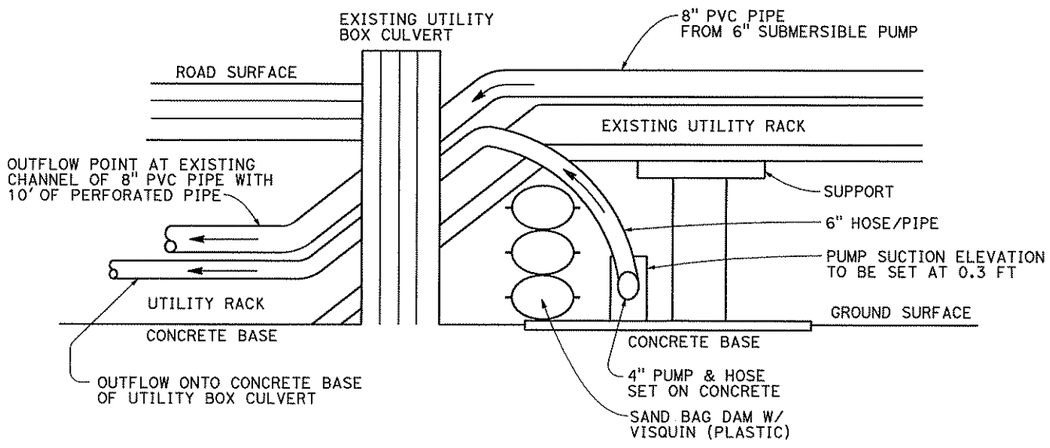


DIAGRAM 4

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — No. — Exp. — CIVIL — STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.

REVISED BY | DATE REVISED

CALCULATED-DESIGNED BY | CHECKED BY

FUNCTIONAL SUPERVISOR

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

LAST REVISION 00-00-00 | DATE PLOTTED => 28-SEP-2007 | TIME PLOTTED => 13:11

BORDER LAST REVISED 3/1/2007 | RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80 | USERNAME => ltejada | DGN FILE => details.dgn | CU 00000 | EA 000000

4. Publicly Owned Treatment Works (POTW) Information For Obtaining Special Discharge Permit To Sanitary Sewer

Central Contra Costa Sanitary District
Source Control Section
5019 Imhoff Place, Martinez CA 94553 (925) 229-7288

CCCSD Special Discharge Permit Application Instructions

(Revised August 2, 2006)

How to Complete the Special Discharge Permit Application

The information about the proposed sanitary sewer discharge is to be filled in on the application form or provided on additional pages, as appropriate. Please complete all sections of the application. Omissions may delay the processing of your permit application. A handwritten application is acceptable provided it is clear and legible.

1. **Discharger Information:** The Discharger is the party ultimately responsible for ensuring that the discharge of wastewater to District facilities complies with Title 10 of the District Code. The Discharger shall be liable for all damages, direct and consequential, caused by violating the terms and conditions of the Special Discharge Permit.

2. **Discharge Site:** The name and street address of the site where the discharge to the sanitary sewer will be conducted.

3. **Permit Contact:** Information about the person with whom the District is to correspond about the permit and the proposed discharge operations.

4. **Property Owner:** The owner of the property where the proposed discharge is generated.

5. **Signature of Discharger or Authorized Representative:** Please read carefully the certification statement and the Definition of Authorized Representative before signing the permit application. An unsigned permit application will not be processed.

6. **Site Description:** Provide a description of current and previous uses of the site where the proposed discharge will be generated.

7. **Description of Proposed Discharge:** Describe the process or operation (e.g., construction excavation, groundwater remediation project) that generates the wastewater proposed for discharge to the sanitary sewer.

Pollutant Information: If relevant to the proposed discharge, identify all pollutants known or suspected to be present in the soil and/or groundwater at the site described in Section 6 of the permit application.

Sampling and Analysis: Provide laboratory analysis data for all previously performed soil, wastewater and groundwater sampling at the site described in Section 6. If extensive sampling and analysis has been done, submit a summary report of all past analytical data plus the complete analytical report for the most recent sampling event. Include a description of the sampling methods used. The District may require additional sampling and analysis of the proposed discharge if deemed necessary to determine compliance with the District's Local Discharge Limits and Title 10 of District Code.

Proposed Pretreatment System: Provide detailed information about the pretreatment equipment and processes that will be used to remove significant solids as well as chemical pollutants from the proposed discharge. Include a pretreatment process schematic diagram.

Proposed Discharge System: Describe how the proposed discharge will be conveyed to the sanitary sewer. Provide detailed information on all components of the proposed discharge system, including pumps, hoses, pipes, flow meter, temporary and permanent connections to the sanitary sewer, location of existing sanitary sewer lines, and proposed discharge location.

If a permanent sanitary sewer connection is needed for this discharge, please contact one of the following for information on connection permits:

- Discharges in the CCCSD service area: CCCSD Permit Section at (925) 229-7371
- Discharges in Concord or Clayton: City of Concord Current Development Department at (925) 671-3052

If the discharge will be trucked to the District's treatment plant, you must use a waste hauler that is under permit with the District. Contact the District's Source Control Section at (925) 229-7288 for more information on the trucked waste program.

How to Submit the Special Discharge Permit Application

Submit the complete, signed application in person or by mail to the address shown at the top of the application form. You may submit it by facsimile to (925) 372-7635, followed by a mailed submittal of the original signed application.

Issuance of a Special Discharge Permit

The District will make a determination regarding acceptance of the proposed discharge based on a review of the completed application. If accepted, a Special Discharge Permit will be issued to you. The processing time for a Special Discharge Permit is approximately two weeks from receipt of the completed application.

Permission to Discharge

A Special Discharge Permit is issued for the operation and monitoring of the specified wastewater discharge, and only for discharge to the District's sanitary sewer system. No discharge to the sanitary sewer system is authorized unless and until a permit has been issued. The permit does not authorize any discharge to the stormwater collection system.

If the discharge location is within Concord or Clayton, permission to discharge to the sanitary sewer collection system must also be obtained from the City of Concord Current Development Department at (925) 671-3052.

Fees and Charges

Please send a check made payable to the Central Contra Costa Sanitary District for $345.00 along with the permit application. The District will assess applicable Capacity Use Charges and Sewer Service Charges (SSC) for the wastewater discharged under this permit. These charges will be billed separately.

CENTRAL CONTRA COSTA SANITARY DISTRICT

Special Discharge Permit Application

Submit completed application to:
CCCSD Source Control
5019 Imhoff Place
Martinez CA 94553

1. Discharger Information

Name	Contact
Mailing Address	Phone

2. Discharge Site

Site Name
Site Address

3. Person to be contacted about this permit

Name	Title
Company Name	Phone (day)
	Phone (other)
Mailing Address	Fax
	e-mail
Emergency Contact	Phone

4. Property Owner

Name and Address	Contact
	Phone

5. Signature of Discharger or Authorized Representative*

I certify under penalty of perjury that this document and all attachments were prepared under my direction or supervision and in accordance with the system designed to insure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person(s) who manages the system, or those directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and/or imprisonment for knowing violations.

Signature	Date
Name	Title
Company	

***Definition of Authorized Representative:** An authorized representative of an industrial user (discharger) may be: (1) principal executive officer, if the industrial user is a corporation; (2) general partner or proprietor if the industrial user is a partnership or proprietorship, respectively; or (3) duly authorized representative of the individual designated above if such representative is responsible for the overall operation of the facilities from which the discharge originates and if such representative is identified in writing by the individual designated in (1) or (2) above.

6. **Site Description**

Current use of site:
Site history: (Describe prior uses of site.)

7. Description of Proposed Discharge

Process or operation that generates the proposed discharge:		
Total volume (gallons)	Duration	Rate of flow (gpm)
Pollutant Information:		
Sampling & Analysis: Has any sampling and analysis of soil, wastewater or groundwater at the site already been performed? ☐ Yes. A summary of all analytical data and the most recent laboratory report are attached. ☐ No. No sampling and analysis has been performed.		
Pretreatment System: (Attach a process schematic diagram.)		
Proposed Discharge System:		
Attach a site plan or drawing showing sources of the proposed discharge, the location of the pretreatment system, sanitary and storm sewer inlets, and the proposed discharge location.		
Proposed start date of discharge:		

CCCSD
SPECIAL DISCHARGE FEES AND CHARGES
~~Effective July 1, 2006~~

SPECIAL DISCHARGE FEES AND CHARGES:

- Permit Fee:

Source Control inspection required	$345.00
No inspection required	$ 65.00

- Sewer Service Charge - Commercial: $2.68/hundred cubic feet

(applies to commercial facilities other than bakeries, markets, mortuaries, and restaurants)

- Sewer Service Charge - Industrial:

Volume	$1,474/million gallons
Demand (peak daily flow)	$177,128/million gallons/day
BOD	$615/1000 pounds
Suspended Solids	$439/1000 pounds
Minimum charge:	$310/year

- Capacity Use Charge* (see attached for rates and formulas)

- Operations & Maintenance (staff time) at cost

* For discharges in most areas of Concord south of Highway 4, this charge is assessed by the City of Concord. Contact the City of Concord for information regarding sewer service charge and capacity use charge.

NOTE: *Fees and charges are subject to change without notice.*

CCCSD
CAPACITY USE CHARGE
For Facilities Under Special Discharge Permits
Effective July 1, 2006

Formula: **Capacity Use Charge = RUE_{SD} X RUF X DCF X days**

Factors:

RUE_{SD}	=	The number of Residential Unit Equivalents of the discharge as determined pursuant to the formula in paragraph 6.12.050.D of District code. (See Formula below)
RUF	=	The Residential Unit Capacity Fee for gravity or pumped zone, in dollars
DCF	=	*i*/365, the Daily Charge Factor based on the rate of interest adopted by the Board of Directors as part of the Schedule of Capital Improvement Fees and Charges in section 6.12.090 of District code. (Currently, *i* = 0.06 >> DCF = 0.000164)
days	=	The total number of days during which wastewater was discharged.

Residential Unit Equivalent (RUE)

Formula: $RUE = Flow_C / Flow_{RU} \{ A+B (BOD_C / BOD_{RU}) + C (TSS_C / TSS_{RU})\}$

Factors:

RUE	=	Residential Unit Equivalent
A	=	Proportion of RUE attributed to flow
B	=	Proportion of RUE attributed to BOD
C	=	Proportion of RUE attributed to TSS
$FLOW_U$	=	Average residential unit flow in gpd
BOD_U	=	Average residential unit BOD in mg/L
TSS_U	=	Average residential unit TSS in mg/L
$FLOW_C$	=	Average facility flow in gpd
BOD_C	=	Average facility BOD in mg/L (Use 0 for groundwater)
TSS_C	=	Average facility TSS in mg/L (Use 0 for groundwater)

Current Rates:
(Effective October 2003)

Residential Unit Capacity Fee (RUF) = $3,983.00/RUE for gravity zone
Residential Unit Capacity Fee (RUF) = $4,971/RUE for pumped zone

Allocations:

A	=	69%
B	=	14%
C	=	17%
$FLOW_{(RU)}$	=	200 gpd
$BOD_{(RU)}$	=	200 mg/L
$TSS_{(RU)}$	=	215 mg/L

Capacity Use Charge & Sewer Service Charge for Groundwater Discharges
Sample Calculation of Charges

Example (Gravity Zone):

Total Volume 1 = 100,000 gallons
BOD = 0 (assumed to be zero for groundwater)
TSS = 0 (assumed to be zero for groundwater)
Peak daily flow = 5,000 gallons/day
Period = 30 days

Capacity Use Charge:	
Volume (gallons)	100,000
Number of days of flow	30
Average Daily Flow (gallons/day)	3,333
Residential Unit Equivalent (RUE)	
(3,333 / 200) x 69% =	11.5
Residential Unit Capacity Fee (RUF-gravity)=	$4,263
Capacity Use Charge	
RUE X RUF x DCF x days =	**$241.20**

Sewer Service Charge: (Industrial Formula)		
Volume:	$1,474.00 / million gallons	$151.70
Demand:	$177,128.00 / million gallons/day (peak flow)	$74.91
BOD & TSS:	(assumed to be zero for groundwater)	$0.00
Sewer Service Charge =		**$220.19**
Total Charges =		**$461.39**

CENTRAL CONTRA COSTA SANITARY DISTRICT
LOCAL DISCHARGE LIMITS*
~~Effective July 12, 1991~~

Pollutant	Discharge Limitation**
Antimony (Sb)	5.00
Arsenic (As)	2.00
Cadmium (Cd)	0.30
Chromium (Cr(T))	1.50
Copper (Cu)	5.00
Lead (Pb)	2.00
Mercury (Hg)	0.05
Nickel (Ni)	3.00
Selenium (Se)	0.30
Silver (Ag)	1.00
Thallium (Tl)	1.50
Zinc (Zn)	5.00
Cyanide (CN)	1.50
Phenol	10.00
PH	5.5 - 12.4 units
Oil & Grease - Mineral	100
Oil & Grease - Animal & Vegetable	300
Total Toxic Organics (TTO) (see reverse for list)	2.10
The following parameters are established in General Discharge Prohibitions of Title 10:	
Radioactivity	Refer to 10CFR20.2003
Closed-Cup Flashpoint (test method 40CFR Part 261.21)	140°F (60°C)
Lower Explosive Limit (LEL)	
2 successive readings	5%
single reading	10%
Temperature	150°F (65°C)
Special Limitations for Groundwater Remediation Projects:	
Benzene, Toluene, Ethylbenzene & Xylene (BTEX)	1.00
Total Petroleum Hydrocarbons (TPH)	10.00

* More stringent limits may apply for industries subject to National Categorical Pretreatment Standards.
** Expressed in mg/L unless otherwise noted.

CCCSD LIST OF TOTAL TOXIC ORGANIC (TTO) POLLUTANTS
~~SUBJECT TO TTO LOCAL LIMIT OR TTO MANAGEMENT PLAN~~

The District's Local Discharge Limits include a parameter called Total Toxic Organics (TTO) with a limit set at 2.10 mg/L. The EPA has created a list of priority organic pollutants which cumulatively make up the District's TTO parameter. The analysis methods set forth in 40 CFR Part 136, Methods 624, 625, and 608, provide data on the TTO constituents. Method 608 may not always be required. Unless specifically required, Method 1613 for dioxin compounds is not mandatory for routine analysis of TTO constituents. The constituents with concentrations greater than 0.01 mg/L must be added together to determine compliance with the District's Local Discharge Limit for TTO. Following is a list of the constituents of TTO:

METHOD 624

Acrolein
Acrylonitrile [2-propenenitrile]
Benzene
Bromoform
[tribromomethane]
Carbon tetrachloride
[tetrachloromethane]
Chlorobenzene
Chlorodibromomethane
Chloroethane
2-Chloroethyl vinyl ether
(mixed)
Chloroform
[trichloromethane]
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
Dichlorobromomethane
1,1-Dichloroethane
1,2-Dichloroethane
1,1-Dichloroethylene
1,2-Dichloropropane
1,3-Dichloropropylene
[1,3-dichloropropene]
1,2-*trans*-Dichloroethylene
[1,2-*trans*-dichloroethene]
Ethylbenzene
Methyl bromide
[bromomethane]
Methyl chloride
[chloromethane]
Methylene chloride
[dichloromethane]
1,1,2,2-Tetrachloroethane
Tetrachloroethylene
[perchloroethylene,
tetrachloroethene]
Toluene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethylene
[Trichloroethene]
Vinyl chloride
[Chloroethylene]
(dichloromethane)

METHOD 625

Acenaphthene
Acenaphthylene
Anthracene
1,2-Benzanthracene
[benzo(a)anthracene]
Benzidine
3,4-Benzofluoranthene
[benzo(b)fluoranthene]
11,12-Benzofluoranthene
[benzo(k)fluoranthene]
1,12-Benzoperylene
[benzo(g,h,i)perylene]
3,4-Benzopyrene
[benzo(a)pyrene]
bis(2-Chloroethoxy) methane
bis(2-Chloroethyl) ether
bis(2-Chloroisopropyl) ether
bis(2-Ethylhexyl) phthalate
4-Bromophenyl phenyl ether
Butyl benzyl phthalate
4-Chloro-3-methylphenol
[*para*-chloro-*meta*-cresol]
2-Chloronaphthalene
2-Chlorophenol
4-Chlorophenyl phenyl ether
Chrysene
1,2,5,6-Dibenzanthracene
[dibenzo(a,h)anthracene]
3,3'-Dichlorobenzidine
2,4-Dichlorophenol
Diethyl phthalate
2,4-Dimethylphenol
Dimethyl phthalate
Di-n-butyl phthalate
4,6-Dinitro-*ortho*-cresol [4,6-
dinitro-2-methylphenol]
2,4-Dinitrophenol
2,4-Dinitrotoluene
2,6-Dinitrotoluene
Di-n-octyl phthalate
1,2-Diphenylhydrazine
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexachloroethane
Indeno(1,2,3-c,d)pyrene
[2,3-*o*-phenylene pyrene]
Isophorone
Naphthalene
Nitrobenzene
2-Nitrophenol
4-Nitrophenol
N-Nitrosodimethylamine
N-Nitroso-di-n-propylamine
N-Nitrosodiphenylamine
Pentachlorophenol
Phenanthrene
Pyrene
1,2,4-Trichlorobenzene
2,4,6-Trichlorophenol

METHOD 608

Aldrin
Alpha-BHC
Alpha-endosulfan
Beta-BHC
Beta-endosulfan
Chlordane (technical mixture
and metabolites)
4,4'-DDD [p,p'-TDE]
4,4'-DDE [p,p'-DDX]
4,4'-DDT [p,p'-DDT]
Delta-BHC
Dieldrin
Endosulfan sulfate
Endrin
Endrin aldehyde
Gamma-BHC [lindane]
Heptachlor
Heptachlor epoxide
PCB-1016 [Arochlor 1016]
PCB-1221 [Arochlor 1221]
PCB-1232 [Arochlor 1232]
PCB-1242 [Arochlor 1242]
PCB-1248 [Arochlor 1248]
PCB-1254 [Arochlor 1254]
PCB-1260 [Arochlor 1260]
Toxaphene

CCCSD INDUSTRIAL USER FACT SHEET
GENERAL DISCHARGE PROHIBITIONS

This fact sheet summarizes the District's general discharge prohibitions that establish enforceable requirements. More detailed information on these requirements can be obtained by reading the complete text in sections 10.08.020, 10.08.030, and 10.08.040 of the District Code.

Prohibited Effects:

- Discharges that pose a threat to human health (District employees, the public) including hazardous conditions and nuisances;
- Discharges that damage, obstruct, or impede the operation and maintenance of the District's collection system and treatment plant;
- Discharges that cause interference with the treatment processes, a "pass-through" event, or any other violation of the permits issued to the District to collect, treat and dispose of wastewater and its residuals;
- Discharges that are prohibited by other statutes or regulations, cause the District to alter its operating permits or plant processes, or prompt additional regulatory oversight by other agencies.

Prohibited Substances or Characteristics:

- Flammable or explosive substances;
- Solid or viscous substances that may cause obstruction of or interference with District facilities;
- Substances having a pH of <5.5 or ≥ 12.5 pH units;
- Liquids, solids or gases that are toxic or hazardous to human health or District operations;
- High temperature wastewater (150°F when discharged to the collection system);
- Significant deviations from the daily quantity and/or quality of wastewater discharged;
- Radioactive substances prohibited by either state or federal regulatory requirements;
- Unpolluted water (e.g.; groundwater, storm water) unless specifically authorized by a District permit;
- Septic tank, holding tank, portable toilet, grease interceptor, oil/sand interceptor wastes unless transported into the treatment plant by a waste hauler permitted by the District;
- Hazardous wastes as defined by either federal or state laws and regulations;
- Wastewater that exceeds any federal categorical discharge limits or the District's Local Discharge Limits.

5. General Waste Discharge Requirements for: Discharge or reuse of extracted and treated groundwater resulting from the cleanup of groundwater polluted by fuel leaks and other related wastes at service stations and similar sites can be found at:

http://www.waterboards.ca.gov/sanfranciscobay/Agenda/11-13-06/5afinalrevised/ORDER%20NO.%20R2-2006-0075rev.pdf